MTC AIDS-II

Use of this program will require the
purchase of Radio Shack's TRSDOS
Disk Operating System.

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Congratulations! You are the owner of one of the most powerful data
management tools available on a small computer. AIDS-II has been
designed as a "total" package. By using the documentation, the demon-
stration program (AIDSDEMO),and the sample AIDS2-based address system
(ADDRSYST), you will become proficient in the use of this critically
acclaimed system in a short time. AIDS-II is a thinking-person's
data manager. As with any non-trivial computer product, you will
have to expend some effort to become thoroughly familiar with the
system . . . for which you will be richly rewarded. Below is an
excerpt from MTC's March, 1980 ad in 80 MICROCOMPUTING magazine.

To get started, familiarize yourself with this manual. When the
"mood" is right, load BASIC, specifying 3 files and setting user
memory at the maximum for your particular machine. (If you have
trouble doing this, refer to your Disk Operating System reference
manual). After inserting your diskette with your AIDS-II system,
type in:

                    RUN "AIDSDEMO"

Section 9.0 of this manual contains a facsimile of the text of
this program.

                    (Cont'd)

This manual has been written in the form of a quick reference guide,
not a tutorial. Once having studied the text of AIDSDEMO, spend
some time "experimenting" with each of the MAIN OPTIONS of the sample
address system, ADDRSYST. For example, try adding data records from
the keyboard. Open this manual to Section 2.0 (the section number
corresponds to the MAIN OPTION number), so that you may readily see
the control options available. By spending a few minutes learning
about each function, you will quickly grasp the fundamental concepts
of AIDS2. To create an AIDS2 system for your specific needs, refer
to Section 9.6. You will find that defining a system takes about
a minute. Section 0.8 contains a brief discussion of the concepts
of AIDS2. In Section 10.0 you will find a discussion of the MTC
AIDS-II PRINT SUBSYSTEM (MAPS), which is capable of producing a
wide variety of formatted output from your AIDS-II disk data files.

It is natural to be overwhelmed at first by the apparent complexity
of the AIDS-II system. It is very similar to learning to drive a
car. Initially the controls are unfamiliar, but with practice, the
operations become very natural . . . almost second nature. Be
patient and take it one step at a time. With a little effort up
front, you'll be able to address your information requirements
better than you may have thought possible.

VIDEO DISPLAY (CRT)   LINE PRINTER OUTPUT

THIS SYMBOL IS   THIS SYMBOL IS

USED TO REPRESENT   USED TO REPRESENT

INFORMATION APPEARING   INFORMATION THAT

ON THE TRS-80   HAS BEEN OUTPUT

VIDEO DISPLAY   ON A LINE

INFORMATION TYPED IN   PRINTER

BY USER IS UNDERLINED.

LABEL-TYPE OUTPUT

THIS SYMBOL IS
USED TO REPRESENT
LABEL-TYPE, PRINTED
OUTPUT

Sections 1 through 8
correspond to the
respective functions
as seen on the MAIN
OPTION screen.

MODEL I   MODEL II

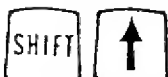|		
ENTER	...	Example of same key being used for identical function on Models I & II.
←	BACK SPACE	Example of different keys used on Models I & II for same function.
SHIFT ↑	F1	Example of the use of a SHIFTED or upper-case key (Model I).

The following are useful notes and observations regarding the use of
AIDS2-based programs:

o   Configure BASIC for 3 files and maximum user memory before
     running programs.

o   AIDS2 features minimal error messages. Some to be concerned
     with are:
     -    OUT OF MEMORY before MAIN OPTION SELECTION screen
          appears: Memory configured too small.
     -    SYNTAX ERROR IN 10XX or OUT OF DATA before MAIN
          OPTION SELECTION screen appears: Data statements
          are improper.
     -    TYPE MISMATCH before MAIN OPTION SELECTION screen
          appears: Probable missing data statement.
     -    BAD FILE = XXXXX: Something wrong with a disk oper-
          ation in file XXXXX including:

          o   Diskette Full - No more Room for data records.
          o   Not a FORMATTED Diskette.
          o   Not an AIDS2-compatible disk data file.
          o   Data file for another AIDS2-based program.
          o   Incorrect filename format.
          o   Misspelled filename.
          o   Disk Drive not turned on.
          o   Diskette is write-protected.
          o   No diskette in disk drive.
          o   Disk Read/Write Error.

     -    FILE = XXXXX IN USE: Attempt to use ACTIVE file XXXXX
          in a way that is not compatible with its original purpose.

o   "SELECT" options will degrade in speed if more than 3/4 of
     total records are being "USED" or if more than 200 records
     are being "USED."

o   Use the following technique to sort more disk data records
     than can be held in memory at one time:
     -    Break up file into logical groups, using a group size
          that will fit in memory. For example, NAME fields can
          be thought of as belonging in groups with beginning
          letters A-H, I-Q, R-Z.
     -    Use SELECT & LOAD in conjunction with SELECT & DELETE
          to load and sort and save individual groups. For Example:
          o   DELETE all records, SELECT & LOAD NAME $<$ I, SORT NAME,
               SAVE "SAVEFILE/DAT".
          o   DELETE all records, SELECT & LOAD NAME $<$ R, SELECT &
               DELETE NAME $<$ I, SORT NAME, SAVE into ACTIVE file.
          o   SELECT & LOAD NAME $>$ Q, SORT NAME, SAVE into ACTIVE
               file.
          o   Deactivate ACTIVE save file.

o   Use the following "windowing" technique to update or add
     records to large disk data files.
     1)   Delete all records from memory.
     2)   Add records from the keyboard.
     3)   Load some records from file to be udpated (use the same
          ACTIVE file after starting process).
     4)   Change any records requiring updates in memory.
     5)   Save records from memory into disk data file (use the
          same ACTIVE file after starting process).
     6)   Repeat 1-5 until entire LOAD file has been updated and
          saved.

```
┌──────────────────────────────────────┐
│          SYSTEM NAME GOES HERE        │
│ # RECORD(S) USED:  0  REMAINING: 222  │
│     RECORDS CONTAIN THE FOLLOWING INFORMATION: │
│ A -1ST FIELD  D -4TH FIELD  G -7TH FIELD  J -10TH FIELD │
│ B -2ND FIELD  E -5TH FIELD  H -8TH FIELD  K -11TH FIELD │
│ C -3RD FIELD  F -6TH FIELD  I -9TH FIELD  L -12TH FIELD │
│           1 - SELECT & LOAD RECORDS   │
│           2 - ADD RECORDS             │
│           3 - SORT RECORDS            │
│           4 - SELECT & UPDATE RECORDS │
│           5 - SELECT & DELETE RECORDS │
│           6 - SELECT & PRINT RECORDS  │
│           7 - SELECT & SAVE RECORDS   │
│           8 - WRITE DESCRIPTOR FILE   │
│                                       │
│   CHOOSE OPTION: _                    │
└──────────────────────────────────────┘
```

The name (title) of the AIDS-II system appears on the top of the screen. The number of data records (in memory) appear below the name. A description of the data fields follows the record counts. To select an option, hit one of the keys below (hitting <ENTER> is not required). Terminating the program deactivates any "ACTIVE" data files (appearing in parentheses after options 1 and 7.

Model I	Model II	
1	...	Select and load data records from a disk file, adding records to those in memory (See Section 1).
2	...	Enter data records from keyboard, adding to those in memory (See Section 2).
3	...	Sort data records currently in memory (See Section 3).
4	...	Select data records in memory for updating (See Section 4).
5	...	Select data records in memory for deletion (See Section 5).
6	...	Select data records in memory for display/printing down the screen/page (See Section 6).
7	...	Select data records in memory to be saved in a disk file (See Section 7).
8	...	Create a disk file describing the format of the data records (See Section 8).
SHIFT ↑	F1	Terminate program operation.

```
                 MTC AIDS-II ADDRESS SYSTEM
 * RECORD(S) USED:   0   REMAINING: 216


 NAME OF LOAD FILE: ADDRSYST/DAT.
```

```
                 MTC AIDS-II ADDRESS SYSTEM
 * RECORD(S) USED:  11   REMAINING: 205


 NAME OF LOAD FILE: ..............

 ACTIVE LOAD FILE=ADDRSYST/DAT
```

```
                 MTC AIDS-II ADDRESS SYSTEM
 * RECORD(S) USED:  11   REMAINING: 205


 NAME OF LOAD FILE: *...........

 ACTIVE LOAD FILE=ADDRSYST/DAT
```

After specifying the criteria through the SELECTION SEQUENCE by which records will be loaded, the name of the disk data file is entered. Upon hitting the ⟨ENTER⟩ key, records will be loaded from the beginning of this file. Each record will be checked to see that it is of the expected length. Loading from the file is terminated under 3 conditions:

1) When all data records in the file have been loaded.

2) When all records in memory have been "USED".

3) If the ⟨↑⟩ key is hit.

If not all records in the file have been loaded, the file is considered to be "ACTIVE". If ⟨SHIFT ↓⟩ key is hit, instead of entering a filename, loading records from the ACTIVE file will continue where the process left off. To "DEACTIVATE" a load file, enter an "*" instead of a filename. Entering any filename automatically deactivates an ACTIVE file. The criteria defined in the SELECTION SEQUENCE applies to all records loaded from all files that are specified.

*** NOTE ***

It is very important not to remove the diskette containing an ACTIVE load file, if the loading process will be continued with that file. If another load file is to be specified, the diskette may be removed.

(Cont'd)

Model I   Model II

Model I	Model II	
↑	...	When hit while loading data records from a file, terminates loading process. When hit in place of entering filename, returns to "SELECTION SEQUENCE".
SHIFT ↑	F1	Returns to "MAIN OPTION SELECTION".
SHIFT ↓	F2	Continue to load data records from "ACTIVE" file.
✱ ENTER	...	Deactivates currently "ACTIVE" file.

```
           MTC AIDS-II ADDRESS SYSTEM
* RECORD(S) USED:  11  REMAINING: 285
     RECORDS CONTAIN THE FOLLOWING INFORMATION.
A -NAME      C -CITY       E -ZIP
B -STREET    D -STATE

          1 - SELECT & LOAD RECORDS (ADDRSYST/DAT)
          2 - ADD RECORDS
          3 - SORT RECORDS
          4 - SELECT & UPDATE RECORDS
          5 - SELECT & DELETE RECORDS
          6 - SELECT & PRINT RECORDS
          7 - SELECT & SAVE RECORDS
          8 - WRITE DESCRIPTOR FILE

   CHOOSE OPTION: _
```

Upon returning to the "MAIN OPTION SELECTION", the name of a currently ACTIVE file will be displayed in parentheses next to the "SELECT & LOAD" option, as shown in this example.

```
             MTC AIDS-II ADDRESS SYSTEM
   * RECORD(S) USED:  0  REMAINING: 216

          NAME: _...............,
        STREET:               |  THESE 5
          CITY:   MAXIMUM      |  FIELDS
         STATE:   FIELD        |  MAKE UP
           ZIP:   SIZE         |  A RECORD

                       FIELD
                       NAMES
```
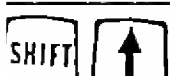
In this example from the "ADDRSYST" AIDS-II system, data may be entered into each of 5 fields. Input from the keyboard is limited to the number of character positions defined for each field. To change a data record after it has been saved, choose the "UPDATE" function in the "MAIN OPTION SELECTION".

Model I   Model II

Model I	Model II	Description
ENTER	...	Enter data into field. When last field is "ENTER"ed, data appearing on screen is saved in new record.
↑	...	Skip up to previous field. Does not alter data previously "ENTER"ed in field.
↓	...	Skip down to next field. Does not alter data previously "ENTER"ed in field.
←	BACK SPACE	Delete the last character in field.
→	TAB	Right justify data within field. Use for typing in numbers.
SHIFT ↑	F1	Cancel record additions and return to "MAIN OPTION SELECTION". Any data on screen is ignored.
SHIFT ↓	F2	Save data appearing on screen into new record. Does not alter data previously "ENTER"ed in field. Does not perform "ENTER".
SHIFT ←	←	Delete entire contents of field.
SHIFT →	→	Restore contents of field to that of data previously "ENTER"ed.

```
┌─────────────────────────────────┐
│        MTC AIDS-II ADDRESS SYSTEM│
│ * RECORD(S) USED: 12  REMAINING: 204│
│                                 │
│ A -NAME    C -CITY    E -ZIP    │
│ B -STREET  D -STATE             │
│                                 │
│                                 │
│ SORT RECORDS BY (A-E): DCA.     │
│                                 │
│                                 │
└─────────────────────────────────┘
```

In this example from the "ADDRSYST"
AIDS-II system, 5 fields may be sorted
in any combination. Enter the field
specifiers (e.g. A-E) in the order in
which the data should appear sorted
for a report. Hit <ENTER> to begin
the sorting process (which will
typically take only a few seconds).

Model I   Model II
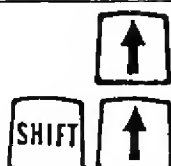
```
   ┌───┐
   │ ↑ │         . . .
┌──┴─┬─┴─┐      ┌───┐
│SHIFT│ ↑ │     │ F1│
└────┴───┘      └───┘
```
Return to MAIN OPTION SELECTION.

```
 ╔═══════════════════════════╗
                      PAGE 1
 STATE CITY       NAME
 ════ ═════════   ══════════════
 NY   BIGTOWN     BLACK, BOB
 NY   BIGTOWN     SMITH, JOHN
 NY   SMALLVILLE  JONES, TOM
 OH   ANYTOWN     BLACK, BOB
 OH   ANYTOWN     BROWN, TED
 OH   ANYTOWN     JONES, TOM
 OH   ANYTOWN     SMITH, JOHN
 OH   OURTOWN     BLACK, BOB
 OH   OURTOWN     BROWN, TED
 OH   OURTOWN     JONES, TOM
 OH   OURTOWN     SMITH, JOHN
 OH   SMALLTOWN   BROWN, TED
```

This "MAPS" report shows how the data
records would be rearranged in memory.
The order of sorting specification
(above) was STATE(D), CITY(C) and
NAME(A). All sorting in AIDS-II is
into ascending order (i.e. lowest
to highest) using the ASCII collating
sequence.

```
        MTC AIDS-II ADDRESS SYSTEM
* RECORD(S) USED:  12   REMAINING: 204

    NAME: SMITH, JOHN .......
  STREET: 123 EAST STREET
    CITY: OURTOWN
   STATE: OH
     ZIP: 44132
```

In this example from the "ADDRSYST" AIDS-II system, any of 5 fields may be altered within the data record being displayed. Records are chosen for updating through the "SELECTION SEQUENCE". Input from the keyboard is limited to the number of character positions defined for each field.

Model I	Model II	
ENTER	...	Enter data into field. When last field is "ENTER"ed, data appearing on screen is saved in old record. Next record meeting selection criteria is displayed.
↑	...	Skip up to previous field. Does not alter data previously "ENTER"ed in field.
↓	...	Skip down to next field. Does not alter data previously "ENTER"ed in field.
←	BACK SPACE	Delete the last character in field.
→	TAB	Right justify data within field. Use for typing in numbers.
SHIFT ↑	F1	Save data appearing on screen into old record. Does not alter data previously "ENTER"ed in field. Does not perform "ENTER". If first record "SELECTED", returns to "SELECTION" screen, otherwise displays previous record meeting selection criteria.
SHIFT ↓	F2	Save data appearing on screen into old record. Does not alter data previously "ENTER"ed in field. Does not perform "ENTER". If all records have been "SELECTED", returns to "SELECTION" screen, otherwise displays next record meeting selection criteria.
SHIFT ←	←	Delete entire contents of field.
SHIFT →	→	Restore contents of field to that of data previously "ENTER"ed.

```
          MTC AIDS-II ADDRESS SYSTEM
 * RECORD(S) USED: 12  REMAINING: 284


 A -NAME      C -CITY      E -ZIP
 B -STREET    D -STATE




 SELECT & DELETE RECORDS BY (A-E) __
```

In this example from the "ADDRSYST" AIDS-II system, data records in memory may be deleted by selecting records by the contents of any 5 fields by hitting a key corresponding to the respective field specifier (A-E). Hitting <ENTER> is not required. Refer to "SELECTION SEQUENCE" for further information.

Model I   Model II

↑ / SHIFT ↑	. . . / F1	Return to "MAIN OPTION SELECTION".
SHIFT ↓	F2	***** CAUTION ***** Delete all data records in memory and return to "MAIN OPTION SELECTION".

```
          MTC AIDS-II ADDRESS SYSTEM
 * RECORD(S) USED: 12  REMAINING: 284


 A -NAME      C -CITY      E -ZIP
 B -STREET    D -STATE




 SELECT & DELETE RECORDS BY
 CITY= SMALL

 (C)OUNT OR (D)ELETE: __
```

In this example, all data records having the first 5 letters of the CITY field equal to "SMALL" will be deleted, if the <D> key is hit. Only data records in memory meeting the specified criteria may be counted or deleted.

Model I   Model II

C	. . .	Count data records in memory meeting specified selection criteria.
D	. . .	Delete data records in memory meeting specified selection criteria.

```
        MTC AIDS-II ADDRESS SYSTEM
* RECORD(S) USED:  12  REMAINING 284


A -NAME       C -CITY       E -ZIP
B -STREET     D -STATE




SELECT & PRINT RECORDS BY (A-E): __
```

In this example from the "ADDRSYST" AIDS-II system, data records in memory may be displayed/printed by selecting records by the contents of any of 5 fields by hitting a key corresponding to the respective field specifier (A-E). Hitting <ENTER> is not required. Refer to "SELECTION SEQUENCE" for further information.

Model I   Model II

Model I	Model II	
[↑] / SHIFT [↑]	. . . / F1	Return to "MAIN OPTION SELECTION".
SHIFT [↓]	F2	Display/Print all data records in memory.

```
        MTC AIDS-II ADDRESS SYSTEM
* RECORD(S) USED.  12  REMAINING. 284


A -NAME       C -CITY       E -ZIP
B -STREET     D -STATE




SELECT & PRINT RECORDS BY
CITY= SMALL

(C)OUNT OR (P)RINT: __
```

In this example, all data records having the first 5 letters of the CITY field equal to "SMALL" will be displayed/printed, if the <P> key is hit. Only data records in memory, meeting the specified criteria, may be counted or displayed/printed.

(Cont'd)

Model I   Model II

Model I	Model II	
[C]	. . .	Count data records in memory meeting specified selection criteria.
[P]	. . .	Display/Print data records in memory meeting specified selection criteria.

JONES, TOM
345 NORTH STREET
SMALLVILLE
NY
10110

BROWN, TED
567 SOUTH STREET
SMALLTOWN
OH
44119

In this example, all data records in memory meeting the specified criteria (CITY=SMALL) are displayed on the Video Display. After all selected records are displayed, control is returned to the "SELECT & PRINT" sequence.

JONES, TOM
345 NORTH STREET
SMALLVILLE
NY
10110

BROWN, TED
567 SOUTH STREET
SMALLTOWN
OH
44119

To obtain printed output on the Model I, simply turn on the printer (and the printer's "SELECT" switch) before completing the "SELECT & PRINT" selection sequence. On the Model II, respond by hitting the <Y> key to the query regarding whether the printer is turned on.

Model I   Model II

⬆	...	Return to "SELECT & PRINT" sequence.
SHIFT @	HOLD	Hold display/printing of data records. Hitting this key again will continue display/printing.

```
       MTC AIDS-II ADDRESS SYSTEM
* RECORD(S) USED:  12   REMAINING: 204

NAME OF SAVE FILE: SAVE/DAT_....
```

After specifying the criteria through
the SELECTION SEQUENCE by which records
in memory will be saved, the name of
the disk data file is entered. Upon
hitting the ⟨ENTER⟩ key, records will
be saved from memory into this file.
Saving of the file is terminated when
all records SELECTED have been saved.

```
       MTC AIDS-II ADDRESS SYSTEM
* RECORD(S) USED:  12   REMAINING: 204

NAME OF SAVE FILE: ..............

ACTIVE SAVE FILE=SAVE/DAT
```

Upon termination, the file is consid-
ered to be "ACTIVE". If the ⟨SHIFT↓⟩
key is hit, instead of entering a file-
name, SELECTED records will be added
to the end of (i.e., appended to) the
ACTIVE file. To "DEACTIVATE" a save
file, enter an "*" instead of a file-
name. Entering any filename auto-
matically deactivates an ACTIVE file.
The criteria defined in the SELECTION
SEQUENCE applies to all records saved
into all files that are specified.

*** NOTE ***

It is very important not to remove
the diskette containing an ACTIVE
save file. All data records that have
been saved will be IRRETRIEVABLY LOST
if the diskette is removed from the
disk drive. DEACTIVATING a file per-
forms a CLOSE operation, after which
the diskette may be removed. All
ACTIVE files are DEACTIVATED upon
normal program termination. (TURNING
THE COMPUTER OFF DESTROYS THE DATA
RECORDS IN MEMORY).

```
       MTC AIDS-II ADDRESS SYSTEM
* RECORD(S) USED:  12   REMAINING: 204

NAME OF SAVE FILE: *............

ACTIVE SAVE FILE=SAVE/DAT
```

Model I   Model II

↑	...	Return to "SELECTION SEQUENCE".
SHIFT ↑	F1	Return to "MAIN OPTION SELECTION".
SHIFT ↓	F2	Append SELECTED data records to the end of the "ACTIVE" file.
✳ ENTER	...	Deactivate (CLOSE) currently "ACTIVE" file.

```
            MTC AIDS-II ADDRESS SYSTEM
 * RECORD(S) USED: 12   REMAINING: 204
      RECORDS CONTAIN THE FOLLOWING INFORMATION:
 A -NAME        C -CITY       E -ZIP
 B -STREET      D -STATE


         1 - SELECT & LOAD RECORDS
         2 - ADD RECORDS
         3 - SORT RECORDS
         4 - SELECT & UPDATE RECORDS
         5 - SELECT & DELETE RECORDS
         6 - SELECT & PRINT RECORDS
         7 - SELECT & SAVE RECORDS (SAVE/DAT)
         8 - WRITE DESCRIPTOR FILE


    CHOOSE OPTION: _
```

Upon returning to the "MAIN OPTION SELECTION", the name of a currently ACTIVE file will be displayed in parentheses next to the "SELECT & SAVE" option, as shown in this example. DO NOT REMOVE THE DISKETTE FROM THE DISK DRIVE IF AN ACTIVE FILE IS DISPLAYED!

```
┌──────────────────────────────────────┐
│           MTC AIDS-II ADDRESS SYSTEM  │
│  # RECORD(S)  USED:  0   REMAINING: 216 │
│                                        │
│  NAME OF DESCRIPTOR FILE: ADDRSYST/DSC. │
│                                        │
└──────────────────────────────────────┘
```

In order to communicate information
such as the names and lengths of the
data fields within the records, an
AIDS2-based program (e.g. "ADDRSYST")
can produce a "DESCRIPTOR" disk file.
This file is required to run AIDS-II
subsystems (e.g. MAPS, which is in-
cluded in the AIDS-II package). This
file need only be created once for
each individual AIDS2-based program
that is defined. (See "DESCRIPTOR
FILE FORMAT" for more information).

Model I   Model II

```
      ┌───┐
      │ ↑ │          . . .      .
      └───┘                              Return to "MAIN OPTION SELECTION".
┌────┐┌───┐           ┌───┐
│SHIFT││ ↑ │          │ F1 │
└────┘└───┘           └───┘
```

CONGRATULATIONS! YOU ARE THE OWNER OF ONE OF THE MOST POWERFUL
DATA MANAGEMENT TOOLS AVAILABLE ON A SMALL COMPUTER, AIDS-II.

SO THAT YOU MAY LEARN HOW TO USE AIDS-II AS QUICKLY AS
POSSIBLE, A SAMPLE ADDRESS SYSTEM ('ADDRSYST') HAS BEEN IN-
CLUDED AS PART OF THIS PACKAGE. AT THE END OF THIS DEMON-
STRATION PROGRAM A SAMPLE DATA FILE WILL BE GENERATED AND THE
AIDS-II BASED 'ADDRSYST' WILL BE RUN AUTOMATICALLY. THIS WILL
ALLOW YOU TO GAIN EXPERIENCE WITHOUT RISKING ANY 'LIVE' DATA.

YOUR AIDS-II PACKAGE CONTAINS THE FOLLOWING PROGRAMS:

        AIDSDEMO - DEMONSTRATION/DOCUMENTATION PROGRAM

        AIDS2 - USER-DEFINED DATA MANAGEMENT PROGRAM

        MAPS - MTC AIDS-II PRINT SUBSYSTEM

        ADDRSYST - SAMPLE AIDS2-BASED ADDRESS SYSTEM

CERTAIN ASSUMPTIONS HAVE BEEN MADE REGARDING YOUR KNOWLEDGE
OF THE COMPUTER. FIRST, THAT YOU KNOW HOW TO 'LOAD' AND 'RUN'
A * BASIC * PROGRAM. IF YOU DO NOT, REFER TO YOUR DISK OPER-
ATING SYSTEM MANUAL. SECOND, THAT YOU KNOW WHAT A DISK FILE IS,
AND THAT DISK FILE NAMES TAKE THE FORM, FILENAME/EXT:D.   NO
KNOWLEDGE OF PROGRAMMING WITH DISK FILES IS REQUIRED, ONLY THAT
YOU CAN ENTER PROPER FILE NAMES. YOUR D.O.S. MANUAL CONTAINS
THIS INFORMATION. THIRD, THAT YOU UNDERSTAND WHAT IS MEANT BY
THE TERM, 'IN MEMORY'. INFORMATION THAT IS 'IN MEMORY' RESIDES
WITHIN THE RANDOM ACCESS MEMORY CIRCUITS, NOT IN A FILE ON
A DISKETTE. THIS DATA IS LOST WHEN THE COMPUTER IS TURNED OFF.
ADDITION, DELETION, UPDATING AND SORTING OF DATA IN AN AIDS-II
SYSTEM IS DONE 'IN MEMORY'. DATA MAY BE SAVED IN A DISK FILE.

TO UNDERSTAND AIDS-II, YOU MUST UNDERSTAND THE CONCEPT OF A
'FIELD', A 'RECORD' AND A 'FILE'. A 'FIELD' IS THE SMALLEST
UNIT OF INFORMATION IN AIDS-II. DATA FIELDS MAY CONTAIN THE
NAME OF A PERSON, A ZIP CODE, AN INVENTORY COUNT, ALMOST ANY-
THING. WITH AIDS-II, YOU DEFINE EACH DATA FIELD BY GIVING IT A
NAME AND SPECIFYING THE NUMBER OF CHARACTERS OF DATA IT MAY
CONTAIN.
A 'RECORD' IS MADE UP OF ONE OR MORE FIELDS. IN MEMORY AND ON
DISK, EACH RECORD'S LENGTH IS THE SAME AND IS EQUAL TO THE SUM
OF THE LENGTHS OF THE INDIVIDUAL FIELDS. THE NUMBER OF RECORDS
CONTAINED WITHIN A DISK FILE ARE LIMITED BY AVAILABLE SPACE ON
THE DISKETTE. AIDS-II WILL AUTOMATICALLY DETERMINE HOW MANY
RECORDS MAY BE IN MEMORY AT ONE TIME.

BELOW IS AN EXAMPLE OF AN ACTUAL RECORD FROM THE SAMPLE ADDRESS
SYSTEM ('ADDRSYST'), AS IT RESIDES IN MEMORY AND ON DISK.

```
        NAME(20)                                    CITY(12)   ZIP(5)
#####################------------------------#############--#####
SMITH, JOHN          123 EAST STREET          OURTOWN    OH44132
---------------------#########################------------##-----
                     STREET(24)                         STATE(2)
```

THE SHADED AREAS SHOW THE LIMITS OF THE INDIVIDUAL FIELDS. ONE
OR MORE RECORDS MAKE UP A 'FILE'. ALL THE RECORDS IN A FILE
HAVE THE SAME NUMBER AND TYPES OF FIELDS. THIS IS A SIMPLE,
BUT VERY IMPORTANT CONCEPT. IT IS THIS COMMONALITY THAT GIVES
AIDS-II ITS POWER AND FLEXIBILITY.

'AIDS2' FORMS THE CORE OF THE AIDS-II SYSTEM. IT PROVIDES THE
ACTUAL DATA MANAGEMENT CAPABILITIES (ADD, DELETE, CHANGE,
SORT, ETC.). AIDS2 WORKS WITH DATA IN MEMORY, WHILE OTHER
'SUBSYSTEMS' (SPECIAL PROGRAMS THAT EXPAND THE CAPABILITIES OF
AIDS2) WORK WITH DISK DATA FILES CREATED BY AN AIDS2-BASED
PROGRAM (E. G. 'ADDRSYST'). THESE SUBSYSTEMS NEED TO 'KNOW'
THE FORMAT OF THE DISK FILES IN ORDER TO PERFORM THE TASKS FOR
WHICH THEY WERE DESIGNED. TO COMMUNICATE INFORMATION SUCH AS
THE NAMES AND LENGTHS OF THE DATA FIELDS WITHIN THE RECORDS IN
THE DISK DATA FILES, AIDS2 CAN PRODUCE A 'DESCRIPTOR' DISK FILE.
IN THIS WAY, A SINGLE SUBSYSTEM MAY BE USED WITH MANY AIDS2-
BASED PROGRAMS.

INCLUDED WITH YOUR AIDS-II PACKAGE IS A SUBSYSTEM CALLED
'MAPS' (MTC AIDS-II PRINT SUBSYSTEM). MAPS GREATLY EXPANDS
AIDS-II'S PRINTED OUTPUT CAPABILITIES. IT CAN QUICKLY AND
EASILY PRODUCE A WIDE VARIETY OF FORMATTED OUTPUT, INCLUDING
REPORTS, LABELS, LISTS, ETC. IT IS WELL WORTH THE EFFORT TO
BECOME FAMILIAR WITH ITS FEATURES.

IF YOU HAVE SPECIAL NEEDS, SUCH AS MAINTAINING COMPLEX MAILING
LISTS OR PERFORMING NUMERIC CALCULATIONS ON YOUR DATA, MTC
OFFERS SEVERAL ADDITIONAL SUBSYSTEMS THAT SIGNIFICANTLY
ENHANCE YOUR AIDS-II PACKAGE. THEY ARE VERY MODERATELY PRICED.

CERTAIN NAMING CONVENTIONS HAVE BEEN ADOPTED FOR SPECIFYING
DISK FILES. LISTED BELOW ARE THE RECOMMENDED CONVENTIONS.

        ADDRSYST   - FOR AIDS2-BASED PROGRAMS, CHOOSE A
                         FILENAME THAT READILY IDENTIFIES THE
                         PURPOSE OF THE PROGRAM

        ADDRSYST/DAT - FOR DISK DATA FILES, USE A 'DAT' EX-
                       TENSION FOR THE FILENAME.

        ADDRSYST/DSC - FOR DESCRIPTOR FILES, USE A 'DSC' EX-
                       TENSION FOR THE FILENAME.

IT IS TIME TO GET YOUR FEET WET. IF YOU FEEL READY TO TRY YOUR
HAND, HIT THE <A> KEY AND A SMALL DISK DATA FILE CALLED
'ADDRSYST/DAT' WILL BE GENERATED AND 'ADDRSYST' WILL AUTO-
MATICALLY BE 'RUN'. MAKE SURE YOU HAVE YOUR DOCUMENTATION NEAR
BY. A GOOD FIRST SESSION SHOULD TAKE ABOUT 1/2-HOUR. IT WILL
TAKE ABOUT 4-5 HOURS OF EXPERIENCE TO TRULY APPRECIATE THE
MORE SUBTLE FEATURES OF THE AIDS-II SYSTEM.

IF YOU FEEL UNEASY AND WISH TO REVIEW THIS TEXT AGAIN, HIT THE
<R> KEY.

IF YOU WISH TO TERMINATE THIS PROGRAM HIT THE <T> KEY.

```
WHICH DISK DRIVE ( 0-3 ) DO YOU WANT THE SAMPLE DISK DATA FILE
WRITTEN ON ? 1

HAVE YOU INSERTED A FORMATTED DISKETTE IN THIS DISK DRIVE ? Y

WRITING 'ADDRSYST/DAT' ON DISK DRIVE 1

'ADDRSYST/DAT' HAS BEEN WRITTEN ON DISK DRIVE 1

RUNNING 'ADDRSYST'
```

SCREEN A

```
┌──────────────────────────────────┐
│         NTC AIDS-II ADDRESS SYSTEM │
│  * RECORD(S) USED: 12  REMAINING: 284 │
│                                    │
│  A -NAME      C -CITY      E -ZIP  │
│  B -STREET    D -STATE             │
│                                    │
│                                    │
│  SELECT & PRINT RECORDS BY (A-E): __ │
│                                    │
└──────────────────────────────────┘
```

In this example from the "ADDRSYST"
AIDS-II system, data records may be
selected by the contents of any of 5
fields by hitting a key corresponding
to the respective field specifier
(A-E). Hitting <ENTER> is not re-
quired.

Model I   Model II
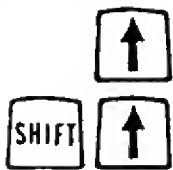
SHIFT ↑ ↑   ... f1   } Return to "MAIN OPTION SELECTION."

SHIFT ↓   f2   Select all data records, skipping remainder of
                          SELECTION SEQUENCE, and perform PRINT, DELETE, etc.

SCREEN B

```
┌──────────────────────────────────┐
│         NTC AIDS-II ADDRESS SYSTEM │
│  * RECORD(S) USED: 12  REMAINING: 284 │
│                                    │
│  A -NAME      C -CITY      E -ZIP  │
│  B -STREET    D -STATE             │
│                                    │
│                                    │
│  SELECT & PRINT RECORDS BY "NAME"  │
│                                    │
│  = EQUAL      < LESS THAN   - LESS OR EQUAL │
│  # NOT EQUAL  > GTR THAN    + GTR OR EQUAL  │
│                                    │
│  CHOOSE RELATION: __               │
│                                    │
└──────────────────────────────────┘
```

Selection of data records is performed
with respect to a specified relation
and field value. For example, STATE=
NY or CITY#CLEVELAND. Specifying
NAME< J would select all names beg-
inning with letters A through I.

(Cont'd)

Model I   Model II

↑   ...   Return to Screen A (above).

SHIFT ↑   f1   Return to "MAIN OPTION SELECTION".

SCREEN C

```
┌─────────────────────────────────┐
│        MTC AIDS-II ADDRESS SYSTEM│
│ • RECORD(S) USED: 12  REMAINING: 284
│
│ A -NAME      C -CITY     E -ZIP
│ B -STREET    D -STATE
│
│
│ SELECT & PRINT RECORDS BY
│ NAME= B................
│
│
└─────────────────────────────────┘
```

In this example, all data records having the first letter of the NAME field equal to a "B" will be selected. Selection is performed by examining each data record with respect to the specified relation and for the length of the specified field value. (NAME= BR would select all records having the first two letters of the NAME field equal to "BR").

Model I	Model II	
↑	...	Return to SCREEN B (Previous Page).
SHIFT ↑	F1	Return to "MAIN OPTION SELECTION".

SCREEN D

```
┌─────────────────────────────────┐
│        MTC AIDS-II ADDRESS SYSTEM│
│ • RECORD(S) USED: 12  REMAINING: 284   COUNT:  6
│
│ A -NAME      C -CITY     E -ZIP
│ B -STREET    D -STATE
│
│
│ SELECT & PRINT RECORDS BY
│ NAME= B
│
│ (C)OUNT OR (P)RINT: C
│
└─────────────────────────────────┘
```

It is sometimes advantageous to count data records in memory meeting specified selection criteria. This provides a means of gauging the scope of a "selection" before taking action (i.e., PRINT, DELETE, etc.). Only data records in memory are counted ("SELECT & LOAD" does not allow a count). To take action, hit the key corresponding to the option selected (e.g. P=PRINT).

(Cont'd)

Model I	Model II	
↑	...	Return to Screen C (above).
SHIFT ↑	F1	Return to "MAIN SELECTION OPTION".
C	...	Count data records in memory meeting specified selection criteria.

```
BLACK, BOB
123 WEST STREET
BIGTOWN
NY
10010


BROWN, TED
234 SOUTH STREET
OURTOWN
OH
44132


BROWN, TED
246 SOUTH STREET
ANYTOWN
OH
44123
```

In the example shown in Screen D (previous page), a "SELECT & PRINT" was chosen for NAME=B. Shown is a sample partial output of such a selection.

```
>LOAD "AIDS2"
READY
>LIST 999-1100
999 ' SYSTEM DESCRIPTORS ( IN "DATA" STATEMENTS )
1000 DATA "SYSTEM NAME GOES HERE": ' NAME OF MTC AIDS-II SYSTEM
1010 DATA 12:  ' NUMBER OF FIELDS ( UP TO 12 )
1020 DATA "1ST FIELD",5: ' FIELD NAME, LENGTH OF DATA FIELD
1030 DATA "2ND FIELD",5, "3RD FIELD",5, "4TH FIELD",4
1040 DATA "5TH FIELD",5, "6TH FIELD",6
1050 DATA "7TH FIELD",7
1060 DATA "8TH FIELD",8, "9TH FIELD",9, "10TH FIELD",1
1070 DATA "11TH FIELD",3, "12TH FIELD",2
1100 ' FIELD NAMES UP TO 12 CHARS. / SUM OF LENGTHS UP TO 254
READY
>_
```

While in BASIC (configured for 3 files), load "AIDS2". Listing lines 999 through 1100 shows the format for defining an AIDS-II system. The information is entered into DATA statements and the program is saved under any legal filename.

```
READY
>LOAD "AIDS2"
READY
>DELETE 1000-1100
READY
>1000 DATA "MTC AIDS-II ADDRESS SYSTEM"
>1010 DATA 5
>1020 DATA "NAME", 20
>1030 DATA "STREET", 24
>1040 DATA "CITY", 12
>1050 DATA "STATE", 2
>1060 DATA "ZIP", 5
>SAVE "ADDRSYST"
READY
>_
```

After "LOAD"ing AIDS2, delete lines 1000 through 1100, as shown. Starting with line number 1000, type in DATA statements for the system name (title) and the number of fields. For each field, type the name and the number of character positions in the field. After this is done, "SAVE" the program under any legal file name.

The Descriptor File is an ASCII-format, sequential file.

MTCAIDS2 . . . . Identifies file as an AIDS-II descriptor file.
SYSTEM NAME GOES HERE . . . . . Name (title) of AIDS-II system.
60 . . . . Length of data records.
12 . . . . Number of data fields in each record.
1ST FIELD . . . . Name of first data field.
5 . . . . Number of character positions in first data field.
1 . . . . Starting position of first data field in record.
2ND FIELD
5
6
3RD FIELD
5
11
4TH FIELD
4
16
5TH FIELD
5

Specifications for each data field are in the

20
6TH FIELD

same format as for the first data field.

6
25
7TH FIELD
7
31
8TH FIELD
8
38
9TH FIELD
9
46
10TH FIELD
1
55
11TH FIELD
1
56
12TH FIELD
2
58

The following are useful notes and observations regarding the use of
AIDS2-based disk data files with MAPS:

o   Configure BASIC for 3 files and maximum user memory before
     running program.

o   MAPS features minimal error messages. Some to be concerned
     with are:
     -    OUT OF MEMORY before MAIN OPTION SELECTION screen
          appears: Memory configured too small.
     -    BAD FILE = XXXXX: Something wrong with a disk oper-
          ation in file XXXXX including:

          o   Not a FORMATTED Diskette.
          o   Not an AIDS2-compatible disk data file.
          o   Data file for another AIDS2-based program.
          o   Incorrect filename format.
          o   Misspelled filename.
          o   Disk drive not turned on.
          o   Improper DESCRIPTOR file.
          o   No diskette in disk drive.
          o   Disk Read Error.
     -    FILE = XXXXX IN USE: Attempt to use ACTIVE file XXXXX
          in a way that is not compatible with its original purpose.

o   MAPS has no sorting capabilities. Data files should be
     sorted, if required, using an AIDS2-based program.

o   MAPS has only simple selection capabilities (i.e., MAPS
     cannot SELECT CITY=CLEVELAND and STATE=OH, simultaneously).
     Use AIDS2-based program's selection functions (LOAD, DELETE,
     SAVE) to produce appropriate disk data file(s).

o   MAPS will not right-justify numbers. This must be done
     using the function available when adding data records from
     the keyboard in an AIDS2-based program.

```
┌─────────────────────────────────────┐
│       NTC AIDS-II PRINT SUBSYSTEM (MAPS) │
│                                         │
│                                         │
│ NAME OF DESCRIPTOR FILE: ADDRSYST/DSC_   │
│                                         │
│                                         │
│                                         │
│                                         │
│                                         │
│                                         │
│                                         │
│                                         │
│                                         │
└─────────────────────────────────────┘
```

In order to communicate infor-
mation such as the names and
lengths of the data fields within
the records in a disk data file,
an AIDS2-based program (e.g.
"ADDRSYST") can produce a "DESCRIP-
TOR" disk file. This file is re-
quired to run MAPS (an AIDS-II
subsystem). Type in the name of
the descriptor file associated
with the disk data file(s) to
be printed.

Model I   Model II

| [SHIFT] [↑]   [f1]   Terminate program operation. |

```
┌─────────────────────────────────────┐
│                                     │
│        MTC AIDS-II ADDRESS SYSTEM   │
│                                     │
│                                     │
│        1 - PRINT DOWN THE PAGE      │
│        2 - PRINT ACROSS THE PAGE    │
│        3 - PRINT USER-DEFINED FORMAT│
│                                     │
│   CHOOSE OPTION: .                  │
│                                     │
│                                     │
│                                     │
│                                     │
│                                     │
│                                     │
└─────────────────────────────────────┘
```

Upon entering the name of the descriptor file, the name (title) of AIDS2-based system, from which the file was generated, will appear at the top of the Video Display screen. Three display/ print options will be presented. Option 1 is used for the production of lists or rosters. Printing is performed down the screen/page in much the same form as the "SELECT & PRINT" option in AIDS2. Option 2 is used for report-type output printed across the screen/page. Page numbers and columnar headings are automatically generated. Option 3 is used for custom labels and non-standard forms of output.

Model I	Model II	
↑ SHIFT ↑	• • • F1	Return to "NAMING THE DESCRIPTOR FILE".
1	• • •	Display/print selected data file records down the screen/page.
2	• • •	Display/print selected data file records across the screen/page (report-type format).
3	• • •	Display/print selected data file records on screen/ page according to user-defined format.

```
           MTC AIDS-II ADDRESS SYSTEM


  A -NAME        C -CITY        E -ZIP
  B -STREET      D -STATE




  PRINT DOWN THE PAGE
  SPECIFY FIELDS (A-E) TO BE PRINTED: ACD.
```

In this example, using a descriptor file generated by the AIDS2-based "ADDRSYST", selected disk data file records will be printed down the page in a manner similar to the AIDS2 "SELECT & PRINT" form. Only those fields specified will be displayed/printed, and will appear in the order defined. A blank line will separate each set of record fields.

Model I   Model II

⬆
SHIFT ⬆   . . .   } Return to "PRINT OPTION SELECTION".
                 F1

```
  BLACK, BOB
  BIGTOWN
  NY

  SMITH, JOHN
  BIGTOWN
  NY

  JONES, TOM
  SMALLVILLE
  NY

  BLACK, BOB
  ANYTOWN
  OH
```

At left is shown a sample of printing down the page using the fields specified above. To obtain printed output, simply turn on the printer (and the printer's "SELECT" switch) before completing the MAPS PRINT SELECTION SEQUENCE.

```
          MTC AIDS-II ADDRESS SYSTEM


  A -NAME        C -CITY        E -ZIP
  B -STREET      D -STATE




  PRINT ACROSS THE PAGE
  SPECIFY FIELDS (A-E) TO BE PRINTED: DCA .
```
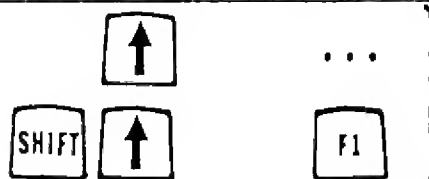
In this example, using a descriptor file generated by the AIDS2-based "ADDRSYST", selected disk data file records will be printed across the page in a report-like format. Only those fields specified will be displayed/printed, and will appear in the order defined. Page numbers are automatically generated, along with columnar headings.

Model I   Model II
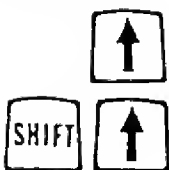
```
  ┌─────┐        . . .
  │  ↑  │
┌─────┐ ┌───┐    ┌───┐
│SHIFT│ │ ↑ │    │ F1│
└─────┘ └───┘    └───┘
```

Return to "PRINT OPTION SELECTION"

```
═══════════════════════════════

                    PAGE 1

  STATE CITY         NAME
  ═══ ═════════      ═══════════════

  NY   BIGTOWN       BLACK, BOB
  NY   BIGTOWN       SMITH, JOHN
  NY   SMALLVILLE    JONES, TOM
  OH   ANYTOWN       BLACK, BOB
  OH   ANYTOWN       BROWN, TED
  OH   ANYTOWN       JONES, TOM
  OH   ANYTOWN       SMITH, JOHN
  OH   OURTOWN       BLACK, BOB
  OH   OURTOWN       BROWN, TED
  OH   OURTOWN       JONES, TOM
  OH   OURTOWN       SMITH, JOHN
  OH   SMALLTOWN     BROWN, TED
```

At left is shown a sample of printing across the page. The data file was sorted, using the fields specified above. Tear lines are printed on page boundaries (every 8½ inches). To obtain printed output, simply turn on the printer (and the printer's "SELECT" switch) before completing the MAPS PRINT SELECTION SEQUENCE.

```
┌─────────────────────────────────────┐
│        MTC AIDS-II ADDRESS SYSTEM    │
│                                      │
│  A -NAME      C -CITY     E -ZIP     │
│  B -STREET    D -STATE               │
│                                      │
│                                      │
│  PRINT USER-DEFINED FORMAT           │
│  SPECIFY FIELDS (A-E) TO BE PRINTED: │
│  A/B/C. D.E.                         │
│                                      │
│                                      │
└─────────────────────────────────────┘
```

In this example, using a descriptor file generated by the AIDS2-based "ADDRSYST", selected disk data records will be displayed/printed according to the user-defined format entered (see left). This example will display/print field "A" on line 1, field "B" on line 2, field "C" on line 3 followed by 2 spaces, field "D", 5 spaces, field "E", and 4 blank lines. (See special character functions below).

CHARACTER (Model I & II)	MEANING
A - L	PRINT RECORD FIELD SPECIFIED
.	PRINT 1 SPACE (BLANK)
;	PRINT 5 SPACES
:	PRINT 10 SPACES
!	PRINT 20 SPACES
/	SKIP DOWN 1 LINE
%	SKIP DOWN 5 LINES
#	SKIP DOWN 10 LINES
All other characters	IGNORED

Model 1	Model II	
[↑]	. . .	Return to "PRINT OPTION SELECTION".
[SHIFT] [↑]	. . .	
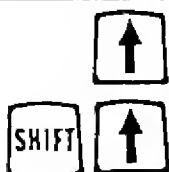
(Cont'd)

```
            MTC AIDS-II ADDRESS SYSTEM


   A -NAME        C -CITY        E -ZIP
   B -STREET      D -STATE




   PRINT USER-DEFINED FORMAT
   SPECIFY FIELDS (A-E) TO BE PRINTED:
   A/B/C. D/E/

   (G)ENERATE SAMPLE OR (S)ELECT & PRINT. __
```

MAPS features the ability to
review a sample display/print
of a user-specified format.
This allows correction or alter-
ation of the specified format
before beginning the MAPS PRINT
SELECTION SEQUENCE.

Model I	Model II	
[↑]	. . .	Return to user-defined format field specification.
[SHIFT] [↑]	[F1]	Return to "PRINT OPTION SELECTION".
[G]	. . .	Generate a sample of the format specified on the Video Display (and printer).
[S]	. . .	Proceed to MAPS SELECTION SEQUENCE.

(Cont'd)

A generated sample of a user-defined format is shown at left. The positions and maximum field sizes are represented by their respective field specifiers. The double dashed line (equal signs) indicates the first printed line of the next disk data record. To obtain printed output, simply turn on the printer (and the printer's "SELECT" switch) before generating sample.
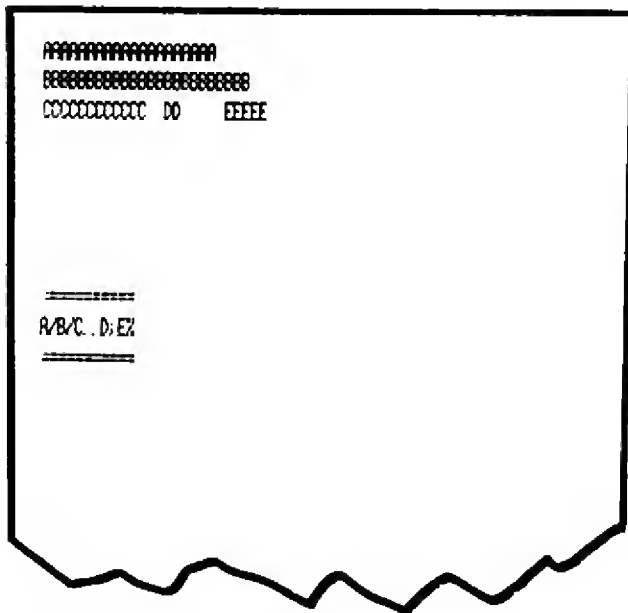
Model I   Model II

| ↑ | ... | Return to user-defined format field specification. |

```
 _____
|                                |
|      NTC AIDS-II ADDRESS SYSTEM |
|                                |
|                                |
|  A -NAME      C -CITY    E -ZIP |
|  B -STREET    D -STATE          |
|                                |
|                                |
|                                |
|  SELECT & PRINT RECORDS BY (A-E): . |
|                                |
|                                |
|                                |
|_____|
```
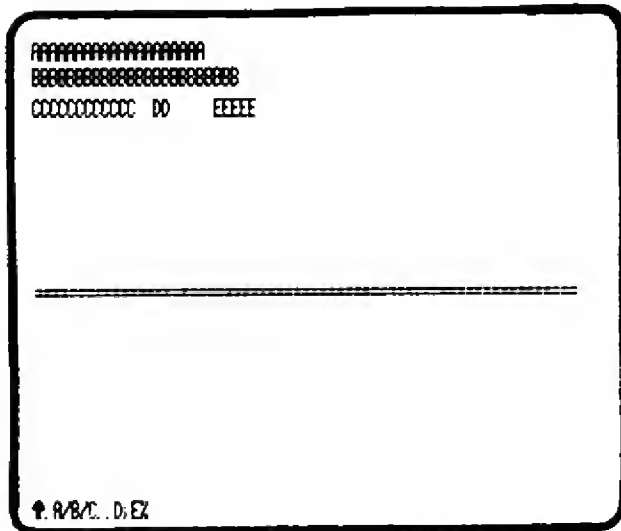
The MAPS SELECTION SEQUENCE is identical, in concept, to the AIDS2 SELECTION SEQUENCE (See Section 9.3). Selection of data records is not from memory, but from disk files. No count of records meeting selected criteria is provided.

Model I	Model II	
↑	...	Return to previous screen.
SHIFT ↑	F1	Return to "PRINT OPTION SELECTION".
SHIFT ↓	F2	Select all disk data records, skipping remainder of SELECTION SEQUENCE.

NTC AIDS-II ADDRESS SYSTEM

NAME OF PRINT FILE: ADDRSYST/DAT_

NTC AIDS-II ADDRESS SYSTEM

NAME OF PRINT FILE: *............

ACTIVE PRINT FILE=ADDRSYST/DAT

After specifying the criteria
through MAPS SELECTION SEQUENCE
by which records will be printed,
the name of the disk data file is
entered. Upon hitting the ⟨ENTER⟩
key, records will be displayed/
printed from the beginning of this
file. Printing from the file will
be terminated if the ⟨↑⟩ key is
hit or when all data records in
the file .have been printed. If
not all records in the file have
been printed, the file is considered
to be "ACTIVE". Entering an "*"
or any filename deactivates an
ACTIVE file. The criteria spec-
ified in the MAPS SELECTION SEQ-
UENCE applies to all records dis-
played/printed from all files that
are specified.

Model I   Model II

[↑]	...	When hit while printing records from a file, termin-ates display/print process. When hit in place of entering filename, returns to "MAPS SELECTION SEQUENCE".
[SHIFT] [↑]	[F1]	Returns to "PRINT OPTION SELECTION".
[SHIFT] [↓]	[F2]	Continue to display/print data records from "ACTIVE" file.
[*] [ENTER]	...	Deactivates currently "ACTIVE" file.

M T C   A I D S - I I

1 THE USER DESCRIBES THE NAME OF THE SYSTEM, THE NUMBER OF FIELDS, AND THE NAME AND SIZE OF EACH FIELD.

```
1000 DATA"AIDS2 ACCOUNTS PAYABLE SYSTEM",12
1010 DATA COMPANY,20, STREET,20, CITY,12, STATE,2, ZIP,5, INVOICE NO.,4
1020 DATA INVOICE DATE,8, DUE DATE,8, PROD./SERV.,30, AMOUNT,7
1030 DATA WRITTEN AMT.,36, G/L ACCOUNT,7
```

3 ADDING RECORDS IS EASY. THE USER CAN'T ENTER MORE INFORMATION THAN IS TO GO IN A FIELD. THE USER CAN GO BACK TO CHANGE A FIELD OR SKIP OVER FIELDS BY PRESSING AN UP OR DOWN ARROW. TO SAVE THE RECORD, THE SHIFT-DOWN ARROW IS HIT. TO SELECT A NEW OPTION, THE SHIFT-UP ARROW IS HIT.

```
            AIDS2 ACCOUNTS PAYABLE SYSTEM
    * RECORD(S) USED: 11   REMAINING: 172

    COMPANY: QUALITY PRINTING CO.
    STREET: 218 FOX AVE.
    CITY: MAPLE HTS.
    STATE: OH
    ZIP: 44121
    INVOICE NO.: 4233
    INVOICE DATE: 79-12-05
    DUE DATE: 80-01-05
    PROD./SERV.: PRINTING - NEWSLETTER
    AMOUNT: 245.31
    WRITTEN AMT.: ** TWO HUNDRED FORTY-FIVE &31/100 **
    G/L ACCOUNT: 705-000_
```

4 A "STABLE" SORT IS USED TO SORT THE RECORDS. THIS ALLOWS THE USER TO ARRANGE THE RECORDS BY "COMPANY" WITHIN "CITY" WITHIN "STATE" BY SIMPLY SORTING BY THOSE FIELDS, IN THAT ORDER. A SORT OF 200 RECORDS WOULD TAKE 3 SECONDS.

```
            AIDS2 ACCOUNTS PAYABLE SYSTEM
    * RECORD(S) USED: 11   REMAINING 172

    A -COMPANY    D -STATE     G -INVOICE DATE J -AMOUNT
    B -STREET     E -ZIP       H -DUE DATE     K -WRITTEN AMT.
    C -CITY       F -INVOICE NO.  I -PROD./SERV.  L -G/L ACCOUNT


    SORT RECORDS BY (A-L): _
```

5 "SELECT" OPTIONS ALLOW THE USER TO CHOOSE RECORDS USING ONE OF SIX RELATIONS ON ANY OF THE FIELDS.

```
            AIDS2 ACCOUNTS PAYABLE SYSTEM


    A -COMPANY    D -STATE     G -INVOICE DATE J -AMOUNT
    B -STREET     E -ZIP       H -DUE DATE     K -WRITTEN AMT.
    C -CITY       F -INVOICE NO.  I -PROD./SERV.  L -G/L ACCOUNT


    SELECT & PRINT RECORDS BY "DUE DATE"

    = EQUAL       ( LESS THAN    - LESS OR EQUAL
    # NOT EQUAL   ) GTR THAN     + GTR OR EQUAL

    CHOOSE RELATION: _
```

2 AIDS-II DECIDES HOW MANY RECORDS THE USER CAN WORK WITH AT ONE TIME, BASED ON AVAILABLE MEMORY. THE USER CHOOSES ONE OF NINE MAIN OPTIONS.

```
            AIDS2 ACCOUNTS PAYABLE SYSTEM
    * RECORD(S) USED: 0  REMAINING: 200
      RECORDS CONTAIN THE FOLLOWING INFORMATION:
    A -COMPANY    D -STATE     G -INVOICE DATE J -AMOUNT
    B -STREET     E -ZIP       H -DUE DATE     K -WRITTEN AMT.
    C -CITY       F -INVOICE NO.  I -PROD./SERV.  L -G/L ACCOUNT

            1 - SELECT & LOAD RECORDS
            2 - ADD RECORDS
            3 - SORT RECORDS
            4 - SELECT & UPDATE RECORDS
            5 - SELECT & DELETE RECORDS
            6 - SELECT & PRINT RECORDS
            7 - SELECT & SAVE RECORDS
            8 - WRITE DESCRIPTOR FILE
            9 - QUIT ( EXIT )

    CHOOSE OPTION: _
```

6 THE SCREEN BELOW WOULD ALLOW THE USER TO PRINT ALL THE RECORDS WITH DUE DATES GREATER THAN DEC. 30, 1979 (79-12-30).

```
            AIDS2 ACCOUNTS PAYABLE SYSTEM


    A -COMPANY    D -STATE     G -INVOICE DATE J -AMOUNT
    B -STREET     E -ZIP       H -DUE DATE     K -WRITTEN AMT.
    C -CITY       F -INVOICE NO.  I -PROD./SERV.  L -G/L ACCOUNT



    SELECT & PRINT RECORDS BY
    DUE DATE) 79-12-30
```

7 "LOAD" AND "SAVE" FILES MAY CONTAIN ANY NUMBER OF RECORDS. A SPECIAL TECHNIQUE CALLED "WINDOWING" IS USED TO WORK WITH ONLY PARTS OF THESE FILES. WRITING A "DESCRIPTOR" FILE ALLOWS OTHER PROGRAMS, PARTICULARLY "MAPS", TO WORK WITH AIDS-II DATA FILES.

```
            AIDS2 ACCOUNTS PAYABLE SYSTEM
    * RECORD(S) USED: 11   REMAINING: 189

    NAME OF SAVE FILE: AP/DAT:1.....
```

8 MAPS (MTC AIDS-II PRINT SUBSYSTEM) IS INCLUDED IN THE BASIC AIDS-II PACKAGE. MAPS IS VERY POWERFUL AND FLEXIBLE, ALLOWING THE USER TO GENERATE LISTS, REPORTS, LABELS, CHECKS, AND MANY OTHER FORMS OF PRINTED OUTPUT. MAPS INCLUDES ALL THE "SELECT" FEATURES OF AIDS-II.

```
            MTC AIDS-II PRINT SUBSYSTEM (MAPS)



    NAME OF DESCRIPTOR FILE: AP/DSC_......
```

9 AFTER A "DESCRIPTOR" FILE IS SELECTED, THE USER MAY CHOOSE ONE OF 3 OPTIONS.

```
            AIDS2 ACCOUNTS PAYABLE SYSTEM

            1 - PRINT DOWN THE PAGE
            2 - PRINT ACROSS THE PAGE
            3 - PRINT USER-DEFINED FORMAT


    CHOOSE OPTION:
```

10 WHEN CHOOSING EITHER THE FIRST OR SECOND OPTION, THE USER SPECIFIES THE FIELDS IN ORDER OF APPEARANCE. PRINTING ACROSS THE PAGE PRODUCES A REPORT-LIKE FORMAT.

AIDS2 ACCOUNTS PAYABLE SYSTEM

A -COMPANY	D -STATE	G -INVOICE DATE	J -AMOUNT
B -STREET	E -ZIP	H -DUE DATE	K -WRITTEN AMT.
C -CITY	F -INVOICE NO.	I -PROD./SERV.	L -G/L ACCOUNT

PRINT ACROSS THE PAGE
SPECIFY FIELDS (A-L) TO BE PRINTED: AHIJ........

COMPANY	DUE DATE	PROD./SERV.	PAGE 1 AMOUNT
ARROW OFFICE&SUPPLY	79-12-30	OFFICE SUPPLIES	34.21
ARROW OFFICE&SUPPLY	88-01-15	OFFICE SUPPLIES	41.32
BURNS MEDIA, INC.	79-12-30	DISKETTES	1200.00
BURNS MEDIA, INC.	88-01-22	PLASTIC CASES	150.25
BURNS MEDIA, INC.	88-01-28	DISKETTES	450.00
QUALITY PRINTING CO.	79-12-30	PRINTING - NATIONAL ADVERTISE.	312.56
QUALITY PRINTING CO.	88-01-05	PRINTING - NEWSLETTER	245.31
QUALITY PRINTING CO.	88-01-27	PRINTING - STATIONARY	818.50
YOUNG OFFICE EQUIP.	79-12-30	FURNITURE - CONFERENCE TABLE	1501.42
YOUNG OFFICE EQUIP.	88-01-12	FURNITURE - DESK	352.21
YOUNG OFFICE EQUIP.	88-01-13	FURNITURE - CONFERENCE CHAIRS	832.05

11 CHOOSING THE THIRD OPTION ALLOWS THE USER TO DEFINE THE PRINT FORMAT. FIELD SPECIFIERS, SEPARATED BY SPECIAL HORIZONTAL AND VERTICAL SPACING INDICATORS, ALLOW UNIQUE FORMATS TO BE CREATED (LIKE THE CUSTOM LABEL BELOW).

AIDS2 ACCOUNTS PAYABLE SYSTEM

A -COMPANY	D -STATE	G -INVOICE DATE	J -AMOUNT
B -STREET	E -ZIP	H -DUE DATE	K -WRITTEN AMT.
C -CITY	F -INVOICE NO.	I -PROD./SERV.	L -G/L ACCOUNT

PRINT USER-DEFINED FORMAT
SPECIFY FIELDS (A-L) TO BE PRINTED:
A/B/C...D;E///

(G)ENERATE SAMPLE OR (S)ELECT & PRINT: _

ARROW OFFICE&SUPPLY
4132 WINSLOW RD.
CLEVELAND   OH   44111

BURNS MEDIA, INC.
25 FOREST RD.
WICKLIFFE   OH   44094

12

	PURCHASES, BY DATE	
DUE DATE	COMPANY	PAGE 1 AMOUNT
79-12-30	ARROW OFFICE&SUPPLY	34.21
79-12-30	BURNS MEDIA, INC.	1200.00
79-12-30	QUALITY PRINTING CO.	312.56
79-12-30	YOUNG OFFICE EQUIP.	1501.42
88-01-05	QUALITY PRINTING CO.	245.31
88-01-12	YOUNG OFFICE EQUIP.	352.21
88-01-13	YOUNG OFFICE EQUIP.	832.05
88-01-15	ARROW OFFICE&SUPPLY	41.32

	PURCHASES, BY PRODUCT	
PROD./SERV.	COMPANY	PAGE 1 AMOUNT
DISKETTES	BURNS MEDIA, INC.	1200.00
DISKETTES	BURNS MEDIA, INC.	450.00
FURNITURE - CONFERENCE CHAIRS	YOUNG OFFICE EQUIP.	832.05
FURNITURE - CONFERENCE TABLE	YOUNG OFFICE EQUIP.	1501.42
FURNITURE - DESK	YOUNG OFFICE EQUIP.	352.21
OFFICE SUPPLIES	ARROW OFFICE&SUPPLY	34.21
OFFICE SUPPLIES	ARROW OFFICE&SUPPLY	41.32

	PURCHASES, BY ACCOUNT	
G/L ACCOUNT	DUE DATE	PAGE 1 AMOUNT
600-000	79-12-30	1200.00
600-000	88-01-22	150.25
600-000	88-01-28	450.00
705-000	79-12-30	312.56
705-000	88-01-05	245.31
705-000	88-01-27	818.50
815-000	79-12-30	34.21
815-000	88-01-15	41.32

SAMPLE CHECK

META TECHNOLOGIES CORPORATION, INC.   **136**

CLEVELAND, OHIO

79-12-30   19____

PAY TO THE ORDER OF   ARROW OFFICE&SUPPLY $ 34.21

*********** THIRTY-FOUR & 21/100 **   DOLLARS

SAMPLE * SAMPLE

NOT NEGOTIABLE * NOT NEGOTIABLE

CITY BANK

FOR   OFFICE SUPPLIES   I. M. Void